

- Numerical Weather Prediction," paper presented at 45th Annual Meeting, American Geophysical Union, Washington, D.C., Apr. 1964.
23. J. Smagorinsky, Personal communication.
24. G. Veronis, "An Analysis of Wind-Driven Ocean Circulations with a Limited Number of Fourier Components," *Journal of the Atmospheric Sciences*, vol. 20, No. 6, Nov. 1963, pp. 577-593.
25. E. T. Whittaker and G. N. Watson, *A Course of Modern Analysis*, 4th ed., Cambridge University Press, 1927, 608 pp.
- [Received June 17, 1964; revised July 14, 1964]

## New Weather Bureau Publications

*Technical Paper No. 49*, "Two- to Ten-Day Precipitation for Return Periods of 2 to 100 Years in the Contiguous United States," J. F. Miller, Washington, D.C., 1964, 29 pp. Price, \$1.00.

In a series of maps and diagrams this paper provides generalized estimates of the precipitation-frequency regime of the contiguous United States for durations from 2 to 10 days and for return periods from 2 to 100 years.

*Technical Paper No. 50*, "Frequency of Maximum Water Equivalent of March Snow Cover in North Central United States," Washington, D.C., 1964, Price, 25 cents.

Maximum water-equivalent values of snow on the ground for the first and second halves of March are presented for probabilities of 50, 20, 10, 4, 2, and 1 percent. The region covered is north of 40° N. and between 80° and 105° W.

## Recent Articles in Other Weather Bureau Periodicals

*Mariners Weather Log*, vol. 8:

No. 4, July 1964:

"Your Weather Observation," A. L. Sugg, pp. 107-108.

"The Weather Bureau Tide Observing Network," N. A. Pore, pp. 108-110.

"Venturi Wind Effect Observed by Robin Trent in Strait of Gibraltar," L. P. Harrison, pp. 110-113.

No. 5, September 1964:

"Raumanga in Hurricane Beulah," M. Gawan-Taylor, pp. 149-154.

"Research Flight Facility Participation in International Indian Ocean Expedition," I. W. Richardson, pp. 155-157.

No. 6, November 1964:

"Wave Climatology as an Aid to Ship Routing in the North Atlantic Ocean," E. J. Joseph and J. M. Kipper, Jr., pp. 183-199.

"Ideas About Ocean Currents—From Benjamin Franklin's Day to the Present," K. Bryan, pp. 199-201.

*Weekly Weather and Crop Bulletin National Summary*, vol. LI:

No. 21, May 25, 1964:

"Redefining Our Weather," A. D. Robb, pp. 7-8.

No. 26, June 29, 1964:

"Variability of Weekly Rainfall," L. A. Joos, pp. 7-8.

No. 28, July 13, 1964:

"Weekly Rainfall Maps," D. A. Peckham and L. A. Joos, p. 8.

No. 30, July 27, 1964:

"Phenology of Lilacs and Wheat in Western United States, Season 1963," J. M. Caprio, pp. 7-8.

No. 37, September 14, 1964:

"Hurricane Cleo, Aug. 20-Sept. 4, 1964" (Preliminary Report), G. W. Cry, pp. 7-8.

No. 39, September 28, 1964:

"Hurricane Dora, Sept. 1-14, 1964," (Preliminary Report), G. W. Cry, pp. 7-8.

No. 41, October 12, 1964:

"Phenology and a Late Spring," L. A. J., p. 8.

No. 42, October 19, 1964:

"Hurricane Hilda, Sept. 28-Oct. 5, 1964," (Preliminary Report), G. W. Cry, pp. 7-8.

No. 45, November 9, 1964:

"Dates of Earliest Snowfall in Washington, D.C.," D. Smedley, p. 8.

No. 47, November 23, 1964:

"The 1930-31 Drought in Northeastern United States," W. C. Palmer, p. 8.

No. 48, November 30, 1964:

"United States Tornado Statistics," L. A. Joos, pp. 7-8.